Remarks

Applicant's undersigned representative thanks the Examiner for the time afforded Applicant during prosecution of this application. This paper is a *bona fide* attempt by Applicant to advance prosecution of the subject application. Reconsideration and allowance of the application are respectfully requested in view of the Remarks provided herein. The objections and rejections to the application are addressed separately below in the order raised in the final Office Action.

Claims Objections:

By this paper, claims 1 & 27 are amended to correct the typographical error in lines 21 & 22, respectively, wherein "firs" is replaced with "first", as suggested by the Examiner. Entrance of this amendment and withdrawal of the claims objection is respectfully requested.

35 U.S.C. §112, Second Paragraph:

Claims 1, 6, 7, 10, 15-17, 20, 21, 26 & 27 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point and out distinctly claim the subject matter which Applicant regards as the invention. By this paper, independent claims 1, 7, 10, 16, 17, 20, 21, 26 & 27 are amended to address the 35 U.S.C. §112, second paragraph, rejection. Specifically, each of these claims is amended to recite *transferring by the first wireless device the instant messaging session to peer-to-peer communication ...* For clarity, these independent claims are amended to delete "a peer-to-peer communication model" and substitute therefor "peer-to-peer communication". As explained further herein, employing Applicant's invention, an instant messaging session is established between a user of a first wireless device and a user of at least one other wireless device employing an instant messaging server. This instant messaging session (i.e., instant messaging chat between the users) is then transferred using Applicant's recited protocol to peer-to-peer communication (i.e., assuming that both the first wireless device and the at least one other wireless device are in a same piconet). Paragraph [0041] of the present application provides an example of this transfer. This paragraph teaches:

[0041] <u>Peer-To-Peer example:</u> A user1 on client1 obtains the roaster from the server with a list of all active wireless clients. From that list user1 selects client2 and user2 to start an instant messaging chat with. The client application compares the piconet_id of client2 with its own piconet_id and finds a match. A new communication socket is established that is based on piconet communication only. Client2 accepts this network request and client1 proceeds to use the newly established socket to send the following XML:

SEND: <message to="user3@client3/r_user3"type="chat">

SEND: <body>This is an invitation to a peer-to-peer chat</body>

SEND: </message>

Client2 receives the stream, parses it and displays the message to user3. *The IM chat then continues over the established peer-to-peer communication path.* (Emphasis added.)

This teaching is believed to support the language of the amended independent claims. Based upon the amendments submitted, therefore, and for the reasons noted above, Applicant respectfully submits that the amended independent claims particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Reconsideration and withdrawal of the 35 U.S.C. §112 rejection is therefore requested.

35 U.S.C. §103:

Claims 1, 7, 10, 16, 17, 20, 21 & 27 stand rejected in the final Office Action under 35 U.S.C. §103(a) as being unpatentable over Collins et al. (U.S. Patent Publication No. 2003/00112823; hereinafter Collins) in view of Vij et al. (U.S. Patent No. 6,452,910; hereinafter Vij), while claims 6, 15 & 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Collins in view of Vij and further in view of Jabber (Jabber.org homepage, printed from 05 December 2000 Archive of Jabber.org; hereinafter Jabber). These rejections are respectfully traversed and reconsideration thereof is requested in view of the comments below.

Piconet vs. Internet:

Initially, Applicant respectfully submits that the final Office Action mischaracterizes the language of their recited invention in stating the rejection. Specifically, Applicant's protocol (discussed further below) relies upon a first wireless device obtaining a list of active wireless devices from an instant messaging server in a same piconet as the first wireless device. Each of

Applicant's independent claims specify that this "piconet" *has a range characteristic indicative of a distance within which radio signals carry between wireless devices of the piconet using direct connection wireless technology.* Applicant respectfully submits that this express language of the independent claims means that the *piconet recited in their independent claims cannot and does not equate broadly to the internet.* Each pending independent claim expressly limits the piconet across which the wireless devices connect to having a range characteristic indicative of a distance within which radio signals carry between wireless devices of the piconet using direct connection wireless technology. Applicant thus respectfully submits that the internet is a different network than his recited piconet.

Additionally, Applicant respectfully submits that a search of the internet for use of "internet" and "piconet" illustrates the clear differences between the two networks. Webopedia defines "piconet" as a network of devices connected in an *ad hoc* fashion using Bluetooth technology. A piconet is formed when at least two devices, such as a portable PC and a cellular phone, connect. A piconet can currently support up to eight devices. When a piconet is formed, one device acts as the master while the others act as slaves for the duration of the piconet connection. "Piconet" is a combination of the prefix "pico" meaning very small or one-trillionth, and "network". In contrast, Webopedia defines the "internet" as a world-wide, publicly accessible network of interconnected computer networks that transmit data by packet switching using the standard internet protocol (IP). It is a "network of networks" that consist of millions of smaller domestic, academic, business, and government networks, which together can vary information and services, such as electronic mail, online chat, file transfer, and the interlinked web pages and other documents of the world wide web. Thus, Applicant respectfully submits that although a "piconet" could be connected to the "internet", that the term "piconet" does not equate to, nor should it be broadly interpreted as the "internet".

Applicant's independent claims expressly define piconet as being characterized in such a way as to necessarily exclude the internet *per se*. Specifically, Applicant's piconet is defined in the independent claims to be a network having a range characteristic indicative of a distance within which radio signals carry between wireless devices of the piconet using direct wireless connection technology. The internet clearly does not have such a range characteristic limitation. Additionally, notwithstanding Applicant's broadly stated definition of piconet in paragraph [0023], other sentences of the paragraph clearly define characteristics of a piconet which

conventionally distinguish the very small network that is a piconet from the global internet. Applicant's piconet is a particular type of network, and does not equate to nor should it be read on the internet as the terms are conventionally defined and used by those skilled in the art.

Since the final Office Action relies upon a mischaracterization of Applicant's recited "piconet" (as defined in the independent claims presented) as equating to the "internet", Applicant respectfully requests reconsideration and withdrawal of the obviousness rejections to the independent claims presented. Acknowledging the difference in Applicant's recited piconet environment compared with the global internet is important to understanding the patentability of Applicant's recited protocol. Various aspects of Applicant's recited protocol are addressed separately below.

Applicant's Protocol:

- subsequent to establishing of the instant messaging session, requesting by the first wireless device *a list of active wireless devices* from the instant messaging server in a same piconet as the first wireless device, the piconet having a range characteristic indicative of a distance within which radio signals carry between wireless devices of the piconet using direct connection wireless technology;

In accordance with Applicant's protocol, after an instant messaging session has been established between the first wireless device and at least one other wireless device using the instant messaging server, the first wireless device then requests *a list of active wireless devices* from the instant messaging server in a same piconet as the first wireless device. As noted above, the piconet is a network having a range characteristic indicative of a distance within which radio signals carry between wireless devices of the piconet using direct connection wireless technology. The internet does not meet this limitation of the network at issue. As such, transferring device 112's IP address to device 100 in Collins does not equate to Applicant's recited protocol wherein the first wireless device requests a list of active wireless devices from the instant messaging server in a same piconet as the first wireless device. Additionally, Applicant's independent claims recite requesting by the first wireless device *a list of active wireless devices* from the instant messaging server in the same piconet as the first wireless device. In Applicant's recited protocol, the list is of active wireless devices. Transfer of a single IP address in Collins to device 100 does not equate to such a list as recited by Applicants.

- *transferring* from the instant messaging server to the first wireless device *the list of active wireless devices* in the same piconet as the first wireless device;

As noted above, Applicant respectfully submits that sending an internet IP address of device 112 to device 100 in Collins does not teach or suggest Applicant's recited functionality. This is because of the distinction between Applicant's recited piconet having a range characteristic indicative of a distance within which radio signals carry between wireless devices of the piconet using direct connection wireless technology, and the global internet. Still further, transferring a single IP internet address does not equate to transferring a list of addresses *per se*. In Applicant's recited invention, there is a transfer from the instant messaging server to the first wireless devices of a *list of active wireless devices* in the same piconet as the first wireless device. This difference is significant in view of the next step of Applicant's protocol.

- employing by the first wireless device the list of active wireless devices in the same piconet *to identify at the first wireless device whether the at least one other wireless device in the instant messaging session belongs to the same piconet as the first wireless device*; and

In Applicant's protocol, this list of active wireless devices in the same piconet is employed by the first wireless device at the first wireless device to determine whether the at least one other device in the instant messaging session (established using the instant messaging server) belongs to the same piconet as the first wireless device. Applicant's inventive protocol relies upon an acknowledgement of the difference between his recited piconet as limited by the independent claims presented (i.e., a network having a range characteristic indicative of a distance within which radio signals carry between wireless devices of the piconet using direct connection wireless technology) and the internet. The internet is a global collection of networks. Applicant's independent claims recite a specific network, that is, a piconet as characterized in the independent claims. For such a piconet, the first wireless device determines from the list of active wireless devices in the same piconet provided by the instant messaging server whether the at least one other wireless device in the instant messaging session previously established by the instant messaging server belongs to the same piconet as the first wireless device. No similar functionality is believed taught or suggested by Collins and Vij, either alone or in combination.

There is no list of active wireless devices (note plural) provided in Collins to first wireless device (100). The final Office Action states that "the mere fact that device 100 uses IP address of device 112 identifies that device 112 is on the internet." Applicant respectfully submits that this statement is not relevant to the recited functionality. In Applicant's approach, there is a transfer of a list of active wireless *devices* in a same piconet as the first wireless device from the instant messaging server. This *list of active wireless devices in the same piconet* is used by the first wireless device to identify whether the at least one other wireless device in the instant messaging session belongs to the same piconet as the first wireless device. A careful reading of Collins and the final Office Action fails to uncover any discussion of a list of active wireless devices *per se*. Rather, the final Office Action relies upon an inherent transfer of an IP address for device 112 to device 100 for an alleged teaching or suggestion of this concept. However, Applicant notes that his recited protocol relies on *a list of active wireless devices* in the same piconet being transferred to the first wireless device.

For at least this reason, Applicant respectfully submits that the final Office Action fails to state a *prima facie* case of obviousness against his recited protocol.

- *if the at least one other wireless device in the instant messaging session belongs to the same piconet as the first wireless device, then without further employing the instant messaging server, transferring by the first wireless device the instant messaging session to peer-to-peer communication employing direct wireless instant messaging communication across the piconet between the first wireless device and the at least one other wireless device.*

In accordance with Applicant's protocol, upon transfer of the list of active wireless devices in the same piconet to the first wireless device from the instant messaging server, then the first wireless device proceeds, without further employing the instant messaging server, to determine that the at least one other wireless device in the instant messaging session belongs to the same piconet and to transfer the instant messaging session (i.e., instant messaging chat) to peer-to-peer communication employing direct wireless instant messaging communication across the piconet between the first wireless device and at least one other wireless device. This concept of transferring the instant messaging session from one of a client-server based communication to a direct peer-to-peer communication *without further employing the instant messaging server* is not taught or suggested by Collins (applied in the final Office Action).

Paragraph [0040] of Collins teaches the opposite to Applicant's recited protocol. In Collins, device 100 first invites, via the rendezvous service, device 112 to establish communication. Device 112 then attempts to establish communication. If communications blocker 104/200 in front of device 100 prevents this attempt, then device 100 responds to this failure by itself, attempting in step 520 to establish communication flow 410 with device 112. *Thus, in Collins, the rendezvous service is employed in the communication processing protocol set forth.* A careful reading of Collins fails to uncover any teaching or suggestion that if the at least one other wireless device (i.e., device 112) in the instant messaging session belongs to the same piconet as the first wireless device (i.e., device 100), *then without further employing the instant messaging server* (rendezvous service 400), transferring by the first wireless device the instant messaging session to peer-to-peer communication employing direct wireless instant messaging communication across the piconet. Applicant is reciting a particular protocol for establishing direct connection between two wireless devices, not simply the concept of establishing direct connection. Rather, Applicant recites a particular protocol for how the connection is established. No similar teaching or suggestion is believed provided by Collins and/or Vij, either alone or in combination.

With respect to the secondary reference, the Vij patent is describing a bridge between different wireless technologies. As shown in FIG. 6 of Vij, a Bluetooth wireless bridge (i.e., network) is employed to link a wireless vehicle to a wireless site which is physically connected via a server to the global internet. This wireless bridge is essentially a piconet which is itself is connected via the server to the internet. Clearly, Vij supports Applicant's above-noted discussion of the difference between his recited "piconet" and the "internet". If a piconet, characterized as recited by Applicant in the independent claims presented, could broadly be read as the internet, then there would be no reason for the Vij patent. The Bluetooth bridge in Vij is one example of a piconet, as recited by Applicant. If it takes a piconet such as described by Vij to connect a Bluetooth device to the global internet, then clearly a piconet is not broadly the internet.

For at least the above-noted reasons, Applicant respectfully submits that the independent claims presented patentably distinguish over the applied art. The Federal Circuit has expressly mandated that functional claim language be considered in evaluating a claim relative to the prior art. Applicant respectfully submits that the application of this standard to the independent claims presented leads to the conclusion that the recited subject matter would not have been obvious to one of ordinary skill in the art based on the applied documents. Specifically, there is no teaching or suggestion in Collins and/or Vij, alone or in combination, which would have lead one of ordinary skill in the art to a protocol such as recited by Applicant which includes: subsequent to establishing of the instant messaging session, requesting by the first wireless device a *list of active wireless devices* from the instant messaging server *in a same piconet* as the first wireless device, *the piconet having a range characteristic indicative of a distance within which radio signals carry between wireless devices of the piconet using direct connection wireless technology*; transferring from the instant messaging server to the first wireless device the list of active wireless devices in the same piconet as the first wireless device; employing by the first wireless device the list of active wireless devices in the same piconet to identify at the first wireless device whether the at least one other wireless device in the instant messaging session belongs to the same piconet as the first wireless device; and if the at least one other wireless device in the instant messaging session belongs to the same piconet as the first wireless device, *then without further employing the instant messaging server*, transferring by the first wireless device the instant messaging session to peer-to-peer communication employing direct wireless instant messaging communication across the piconet between the first wireless device and the at least one other wireless device.
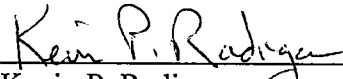
The Jabber article cited in connection with dependent claims 6, 15 & 26 is not believed to address any of the above-noted deficiencies of Collins and Vij when applied against the independent claims. As such, and without acquiescence to the characterizations of Jabber contained in the final Office Action, Applicant respectfully submits that the combination of Collins, Vij and Jabber also does not teach or suggest the subject matter of the independent claims presented.

All claims are believed to be in condition for allowance, and such action is respectfully requested.

Again, Applicant thanks the Examiner for the time afforded him in consideration with the present application. If any issue remains unresolved, the Examiner is invited to telephone Applicant's undersigned representative to further discuss the application and thereby facilitate advancing prosecution.

Respectfully submitted,

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